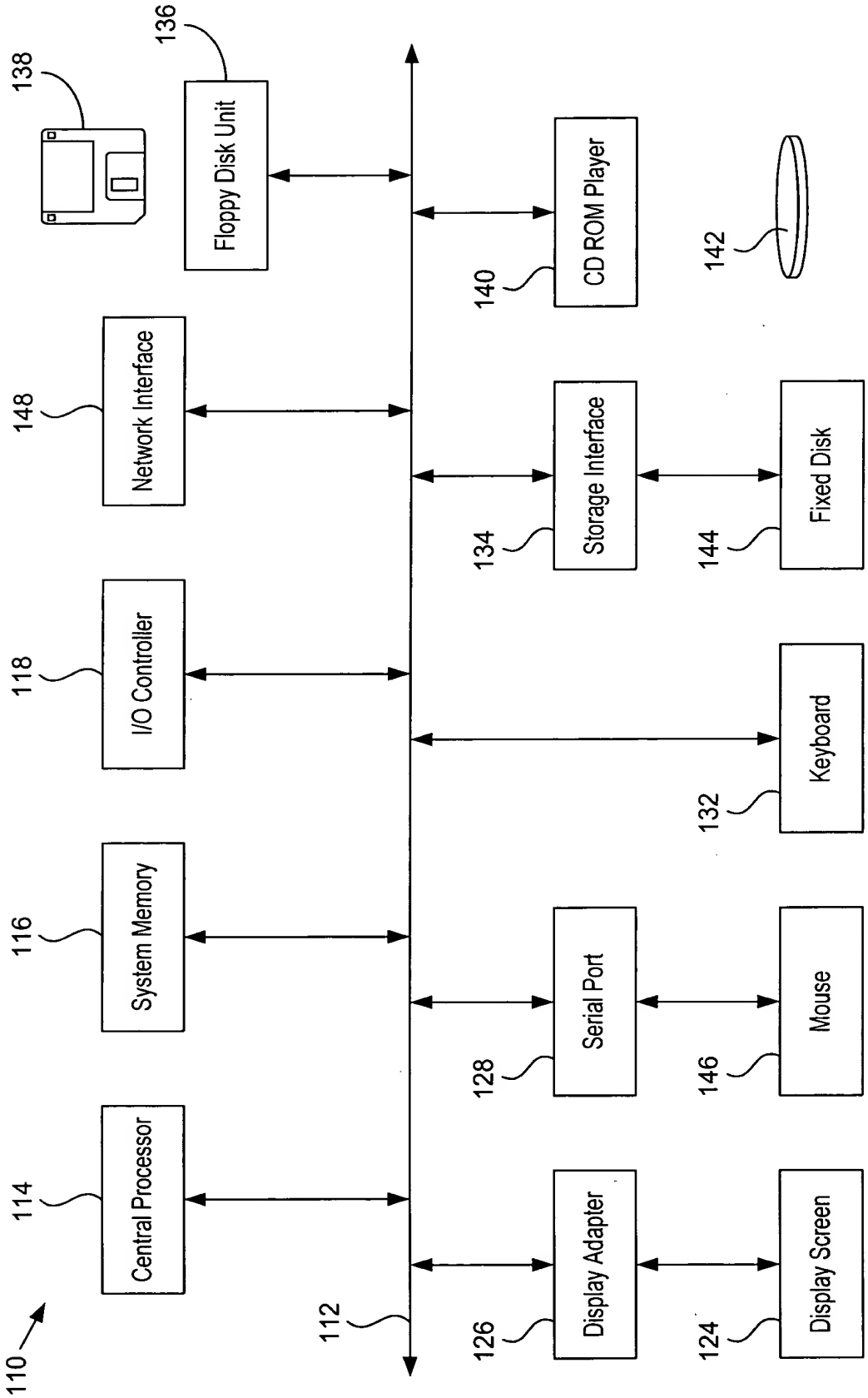


FIG. 1

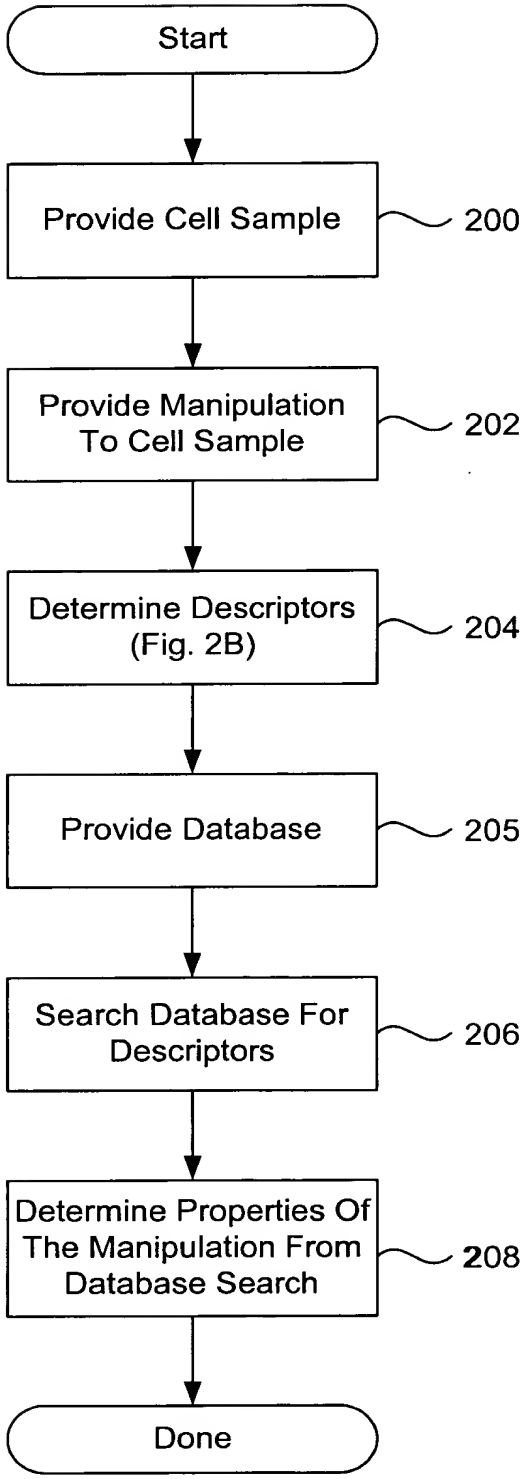


FIG. 2A

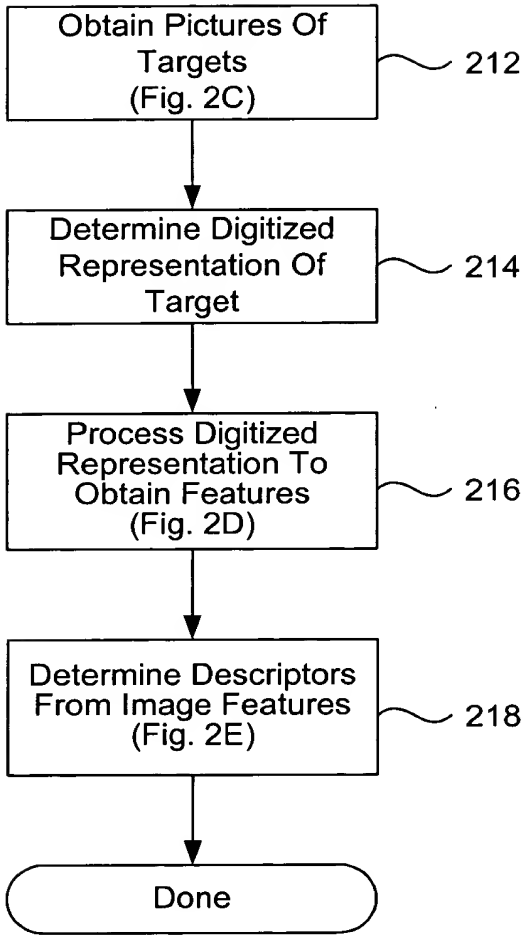


FIG. 2B
Step 204 of Fig. 2A

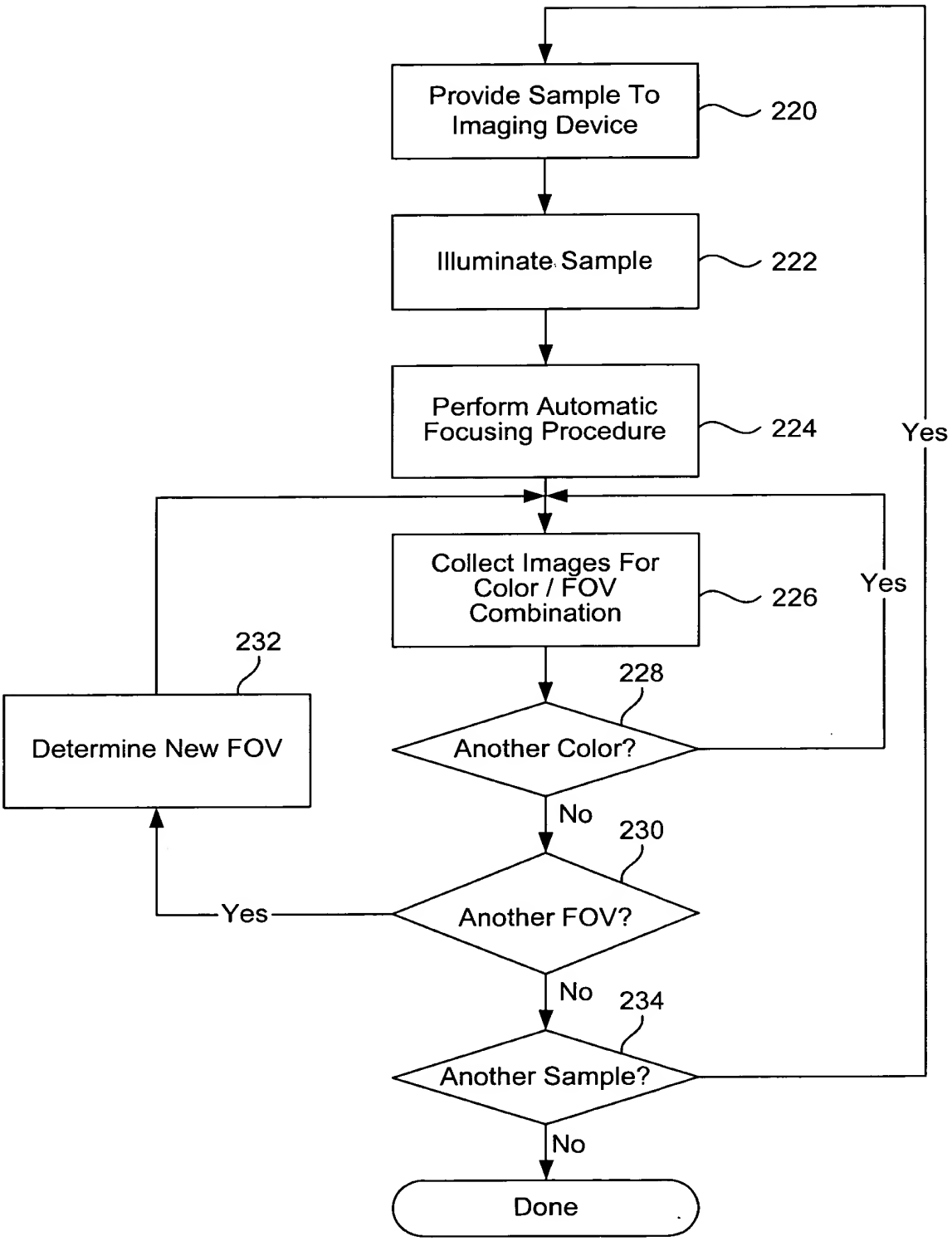


FIG. 2C
Step 214 of Fig. 2B

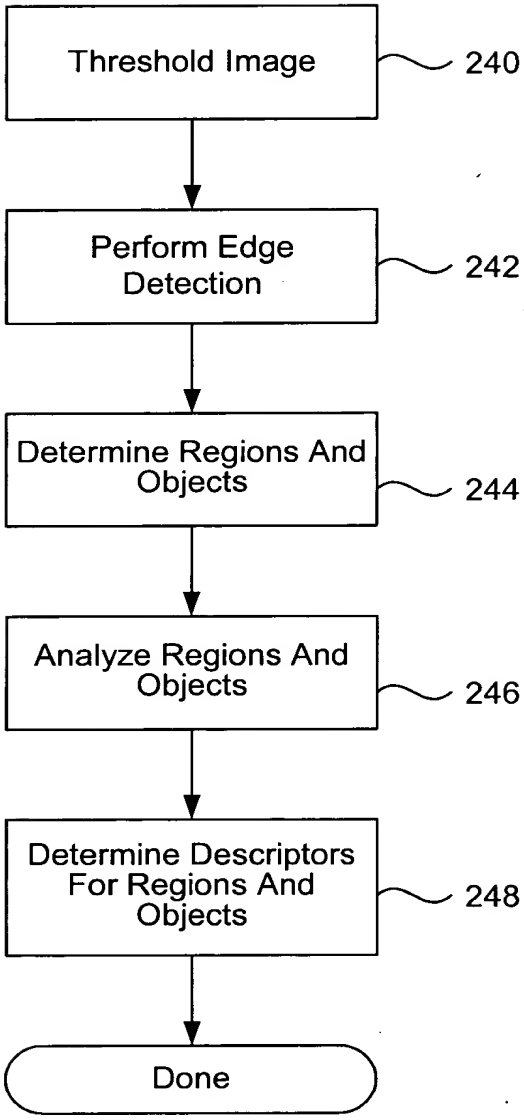


FIG. 2D
Step 216 of Fig. 2B

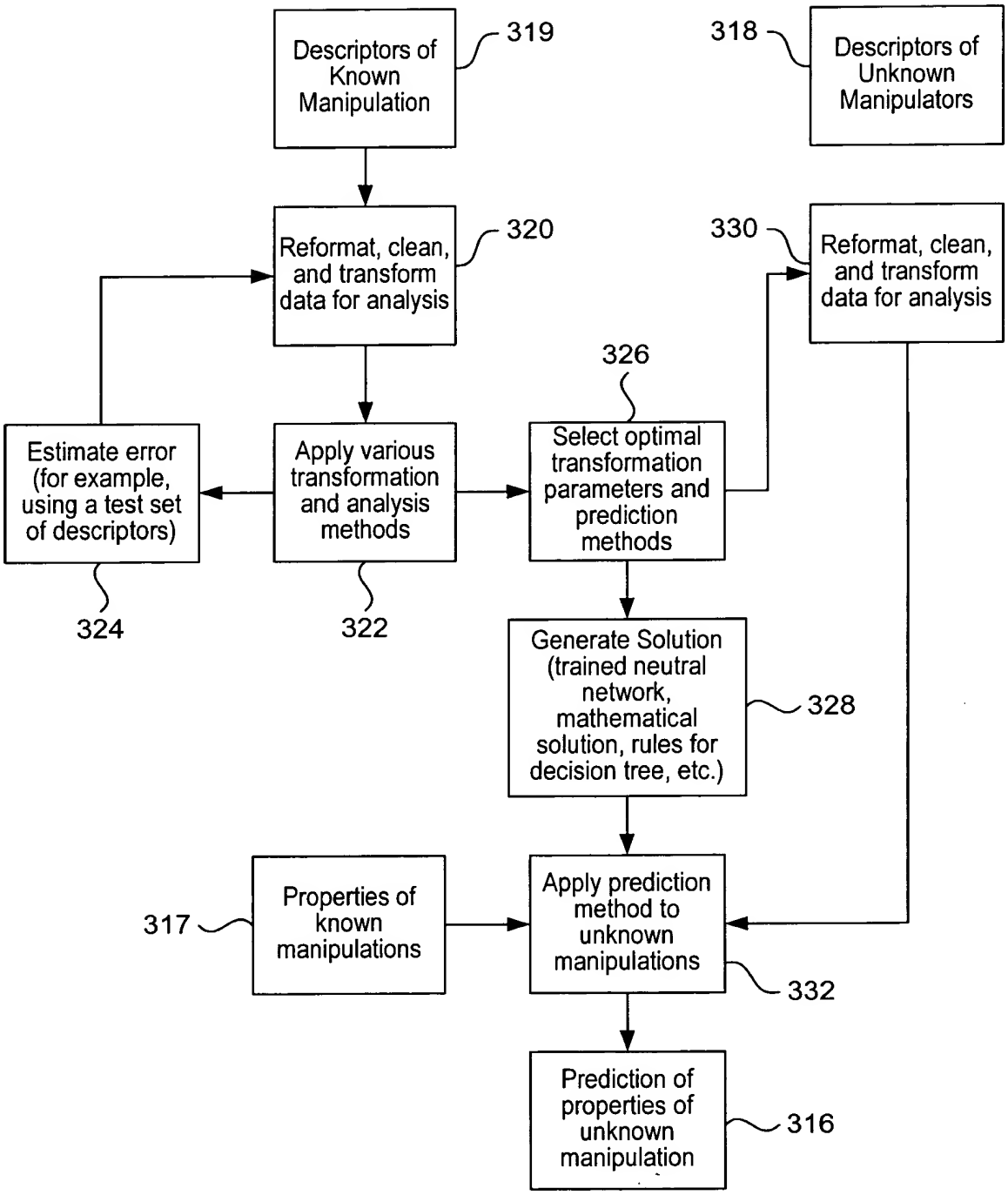


FIG. 2E

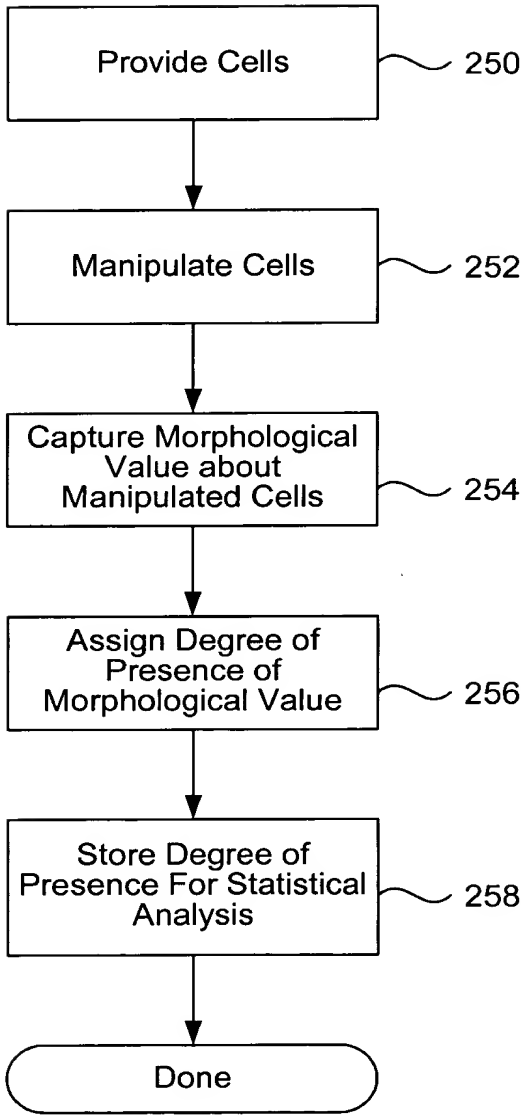


FIG. 2F

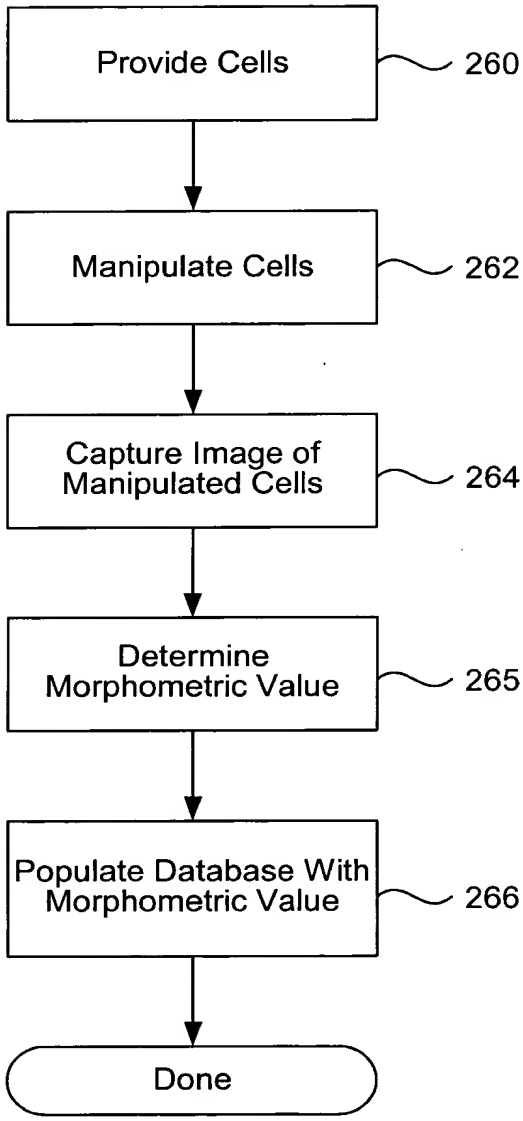


FIG. 2G

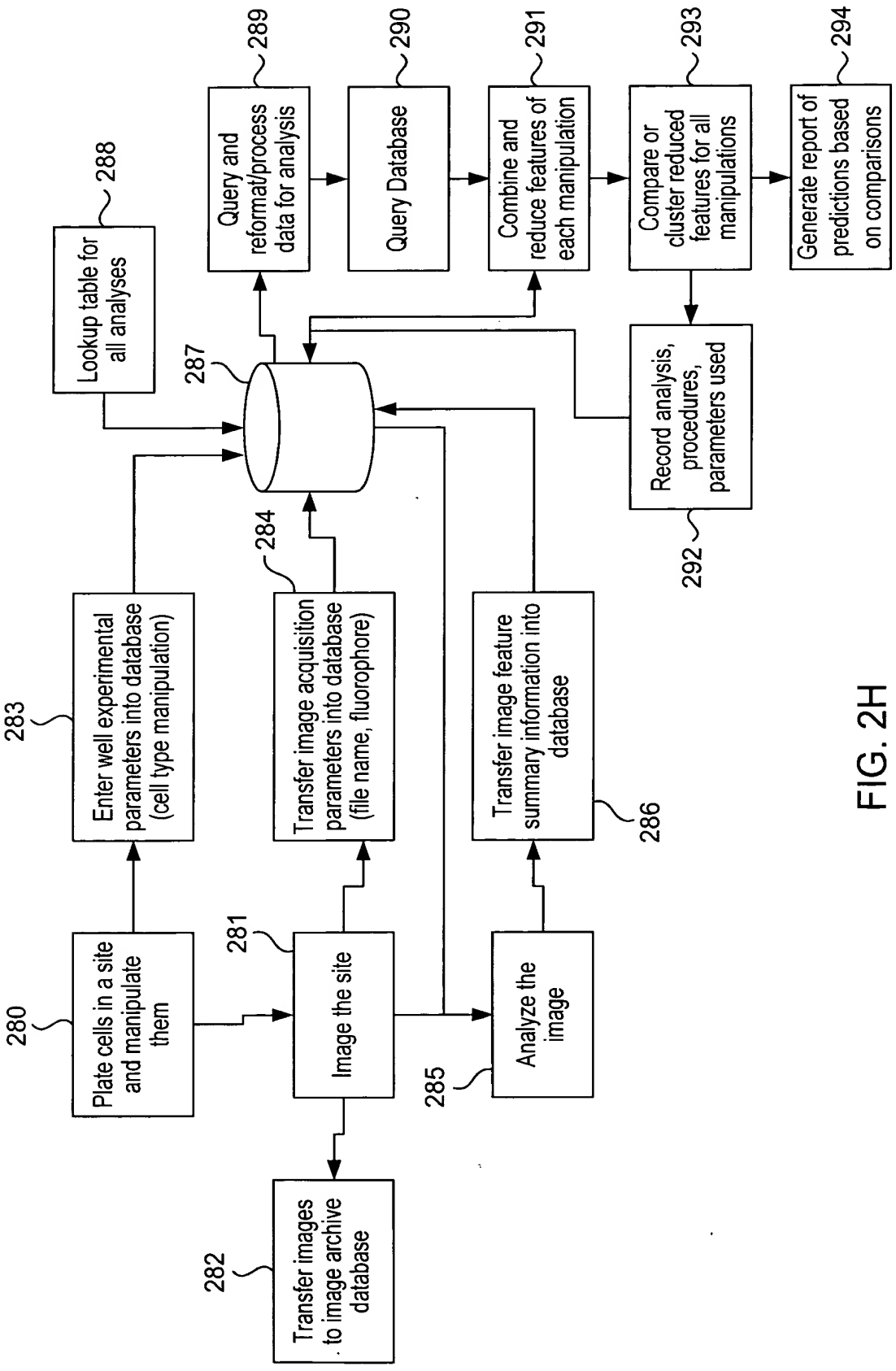


FIG. 2H

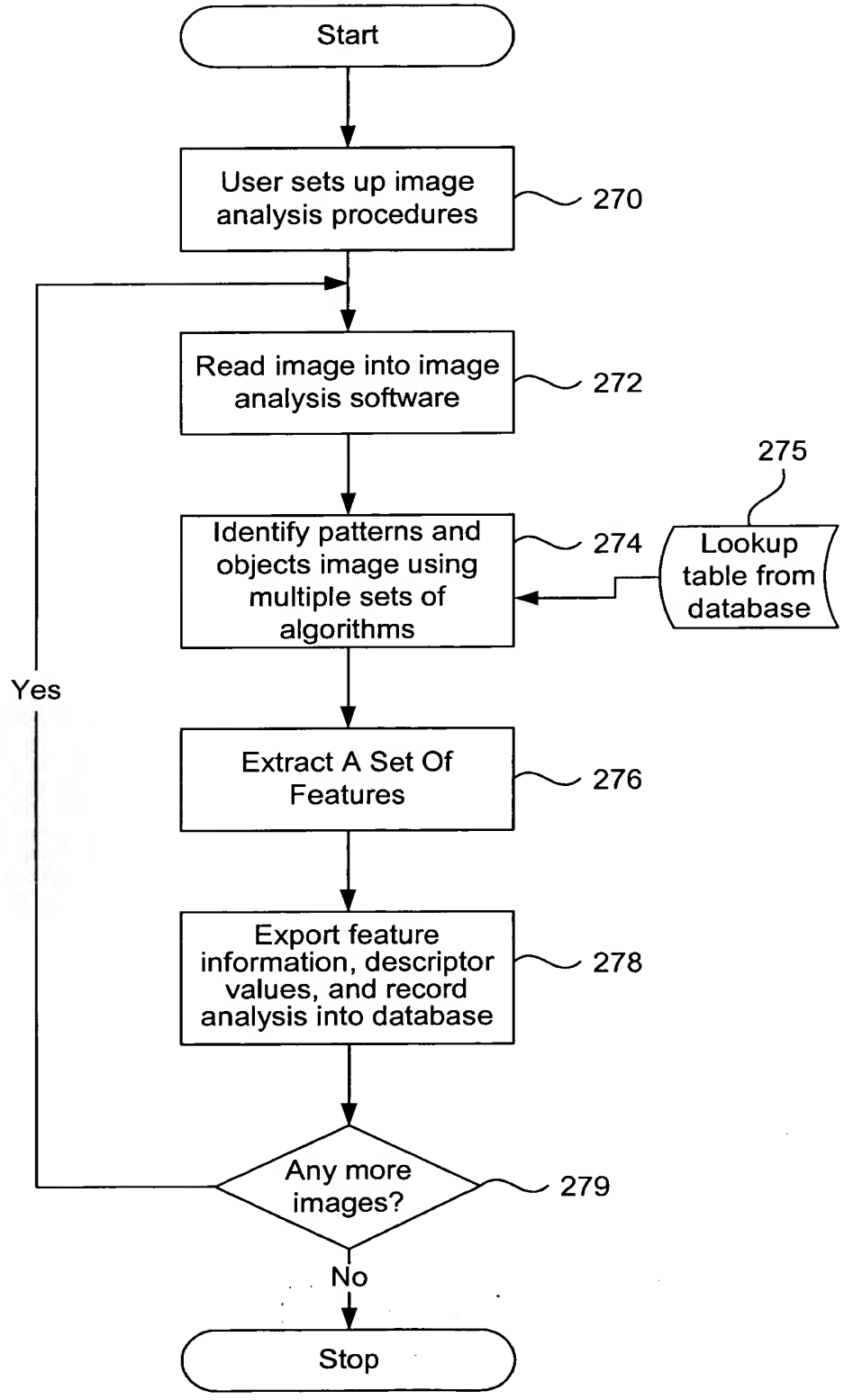


FIG. 2I

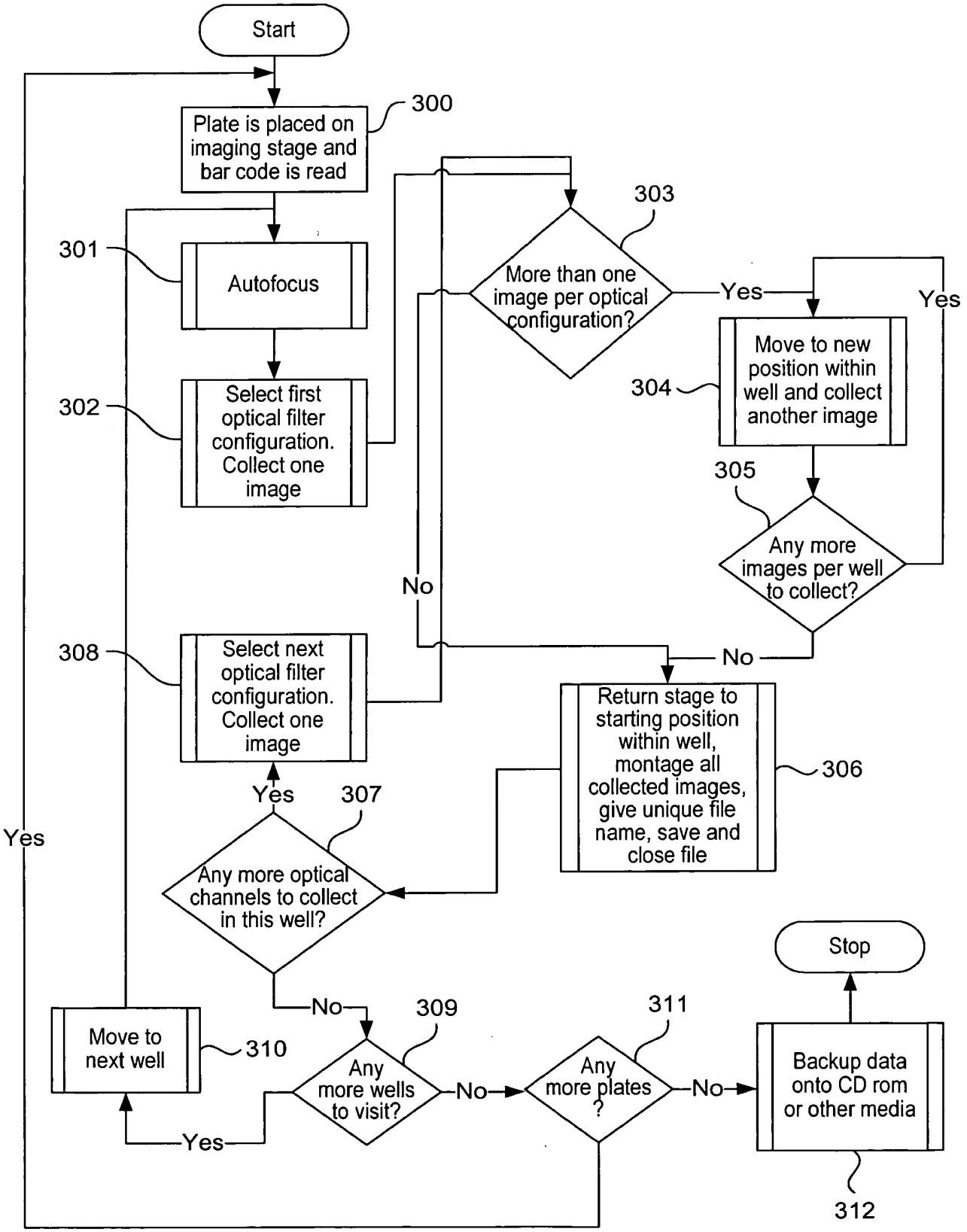


FIG. 2J

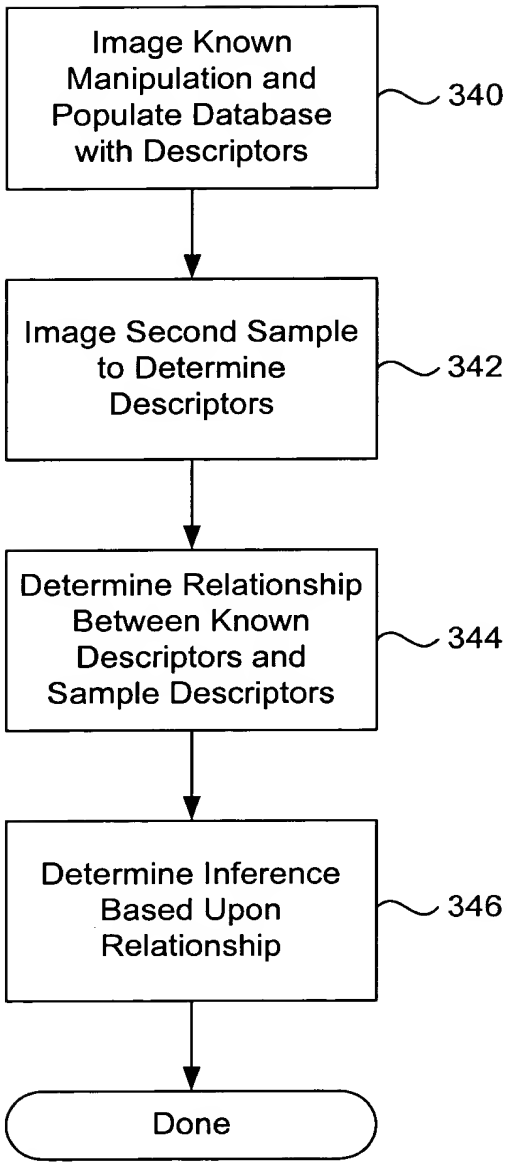


FIG. 2K

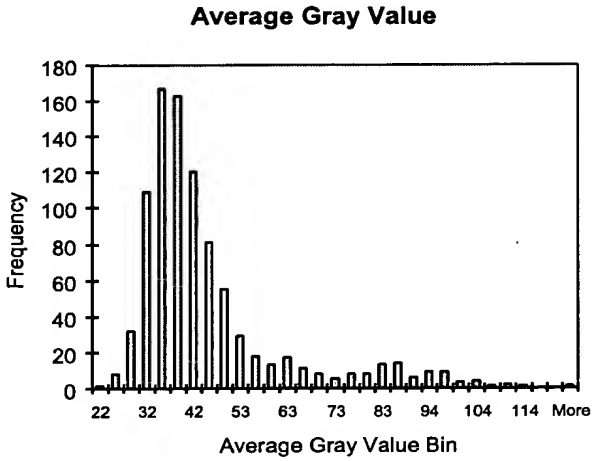


FIG. 3A

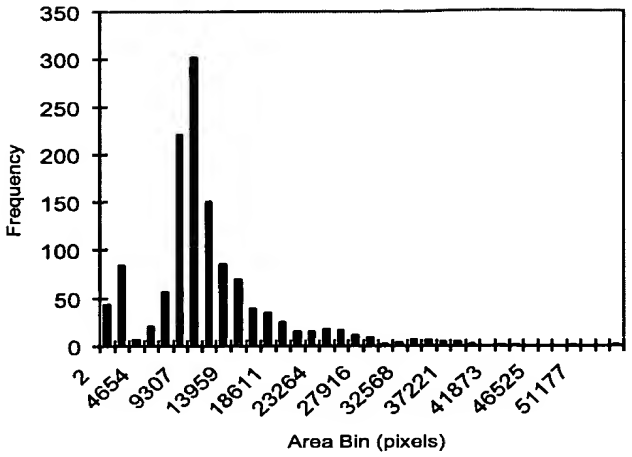


FIG. 3B

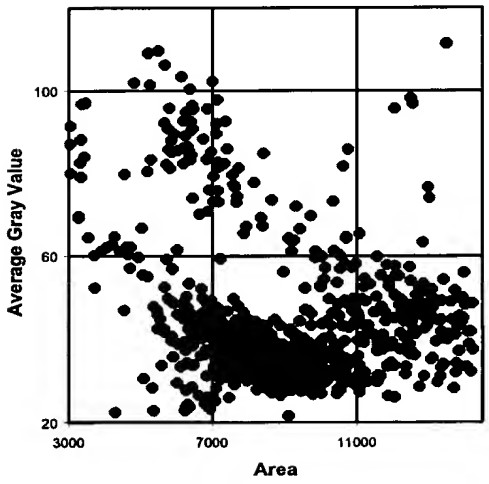


FIG. 3C

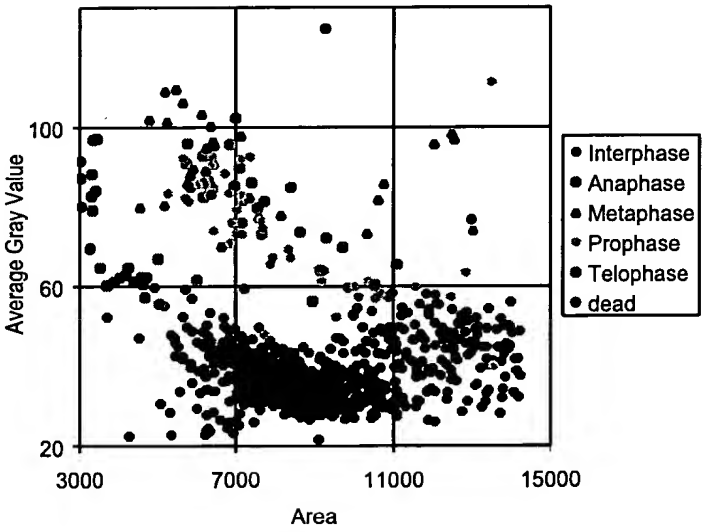


FIG. 3D

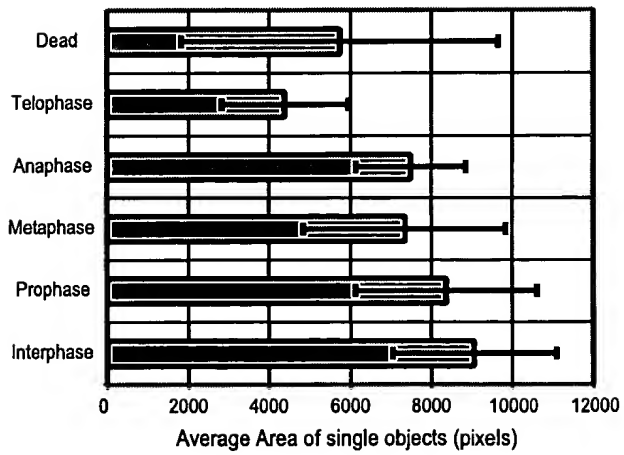


FIG. 3E

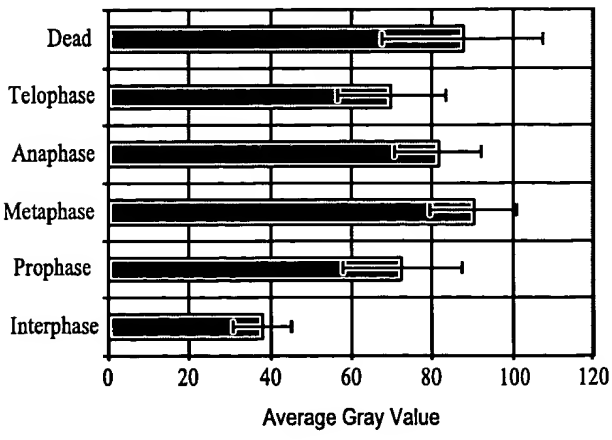


FIG. 3F

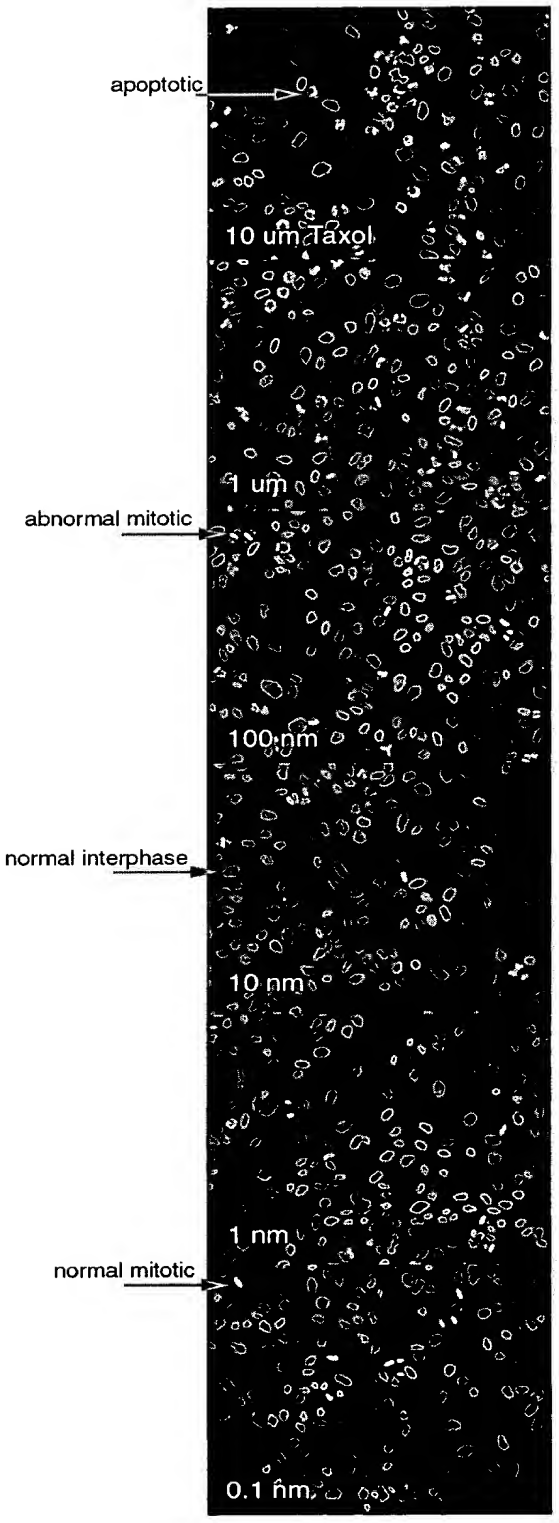


FIG. 4

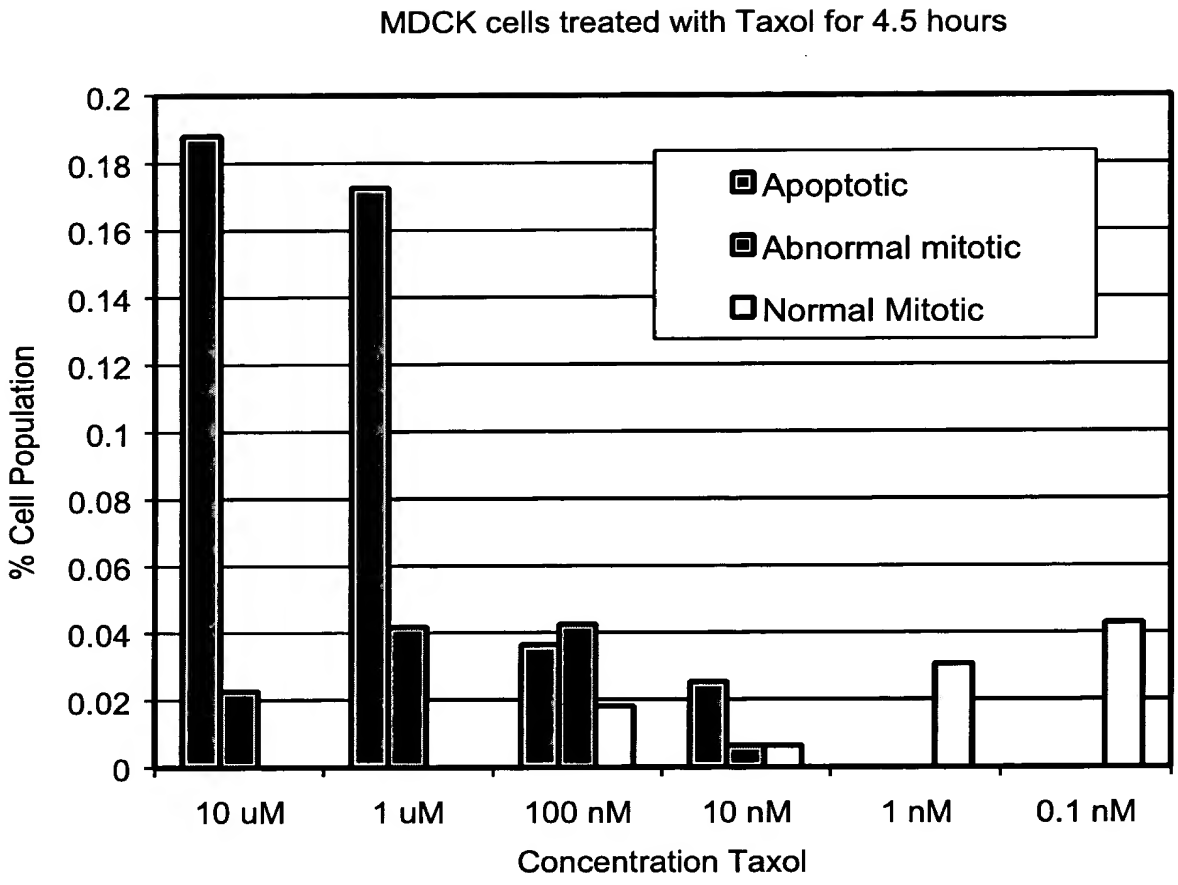


FIG. 5

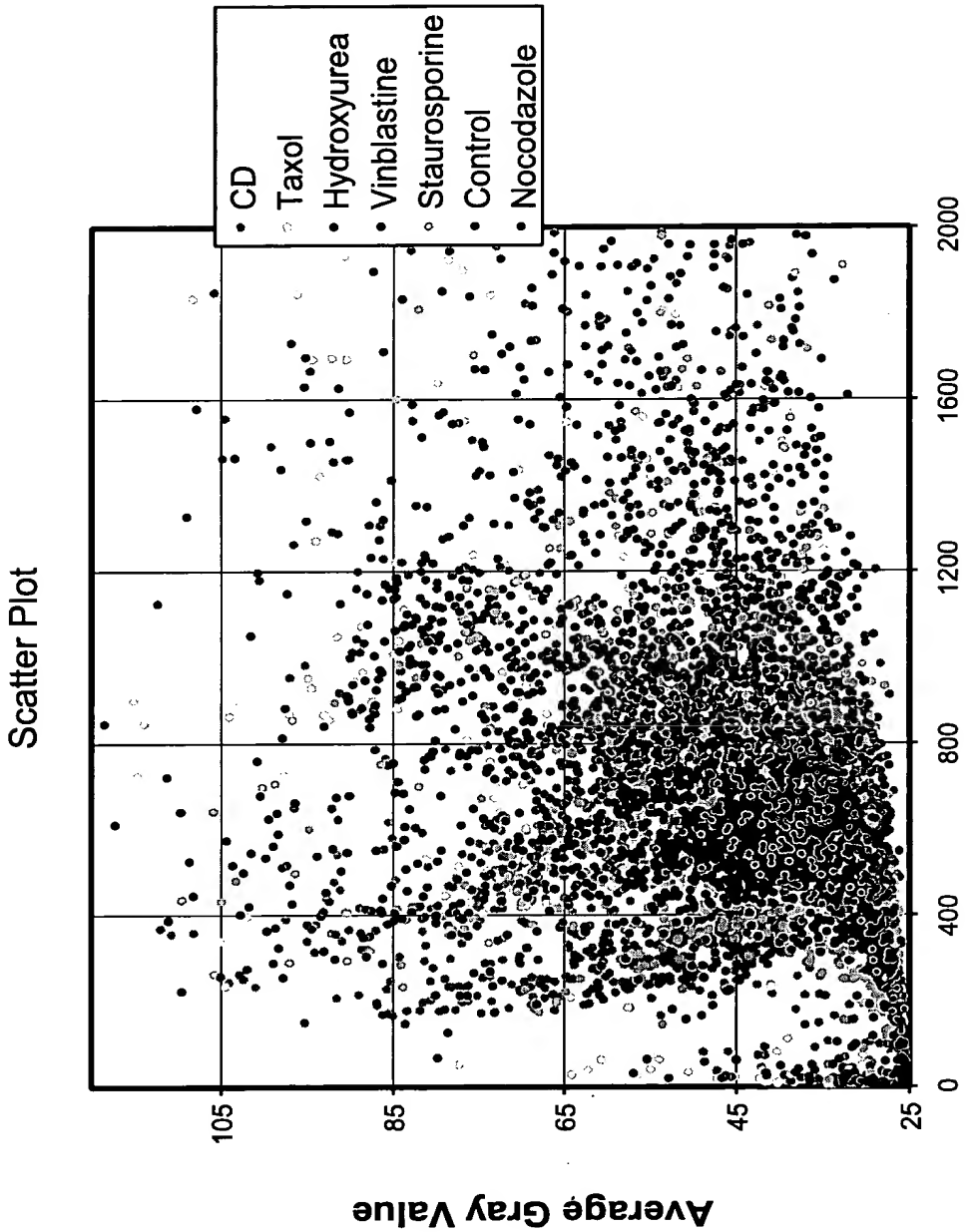


FIG. 6

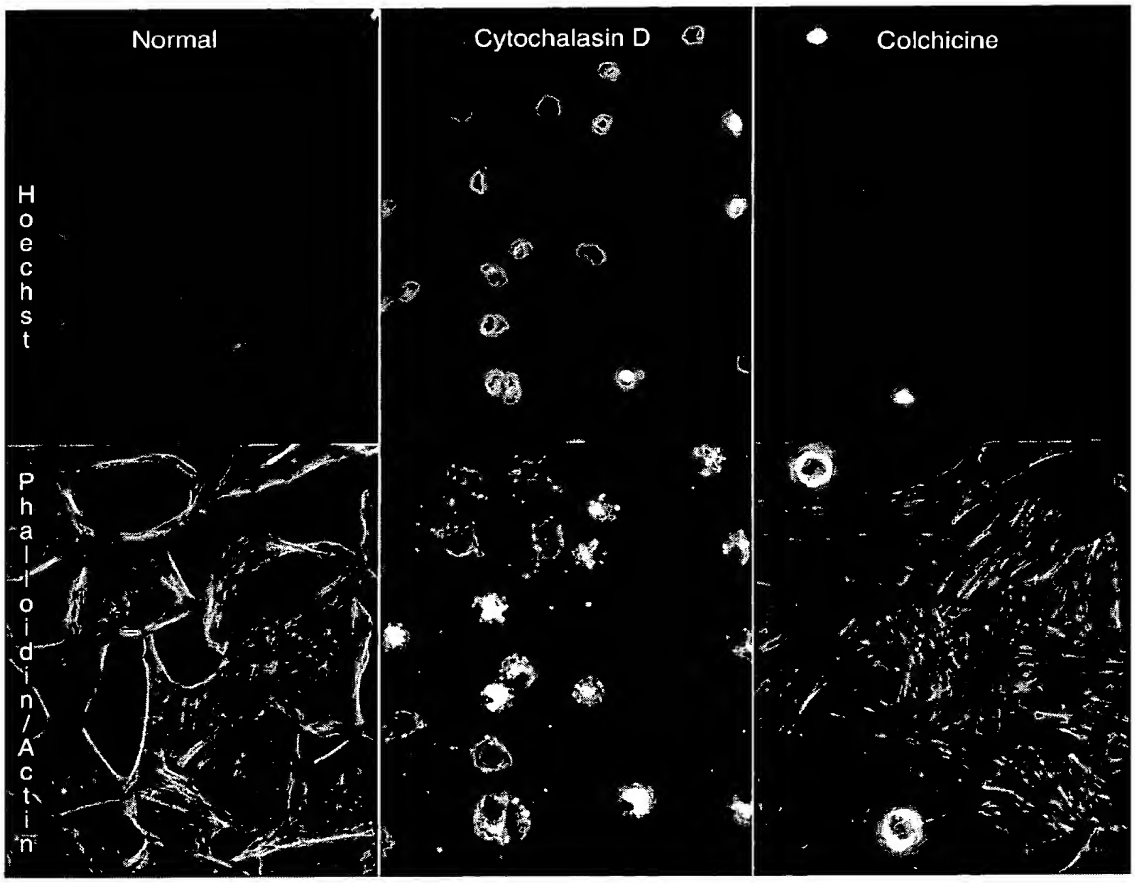


FIG. 7

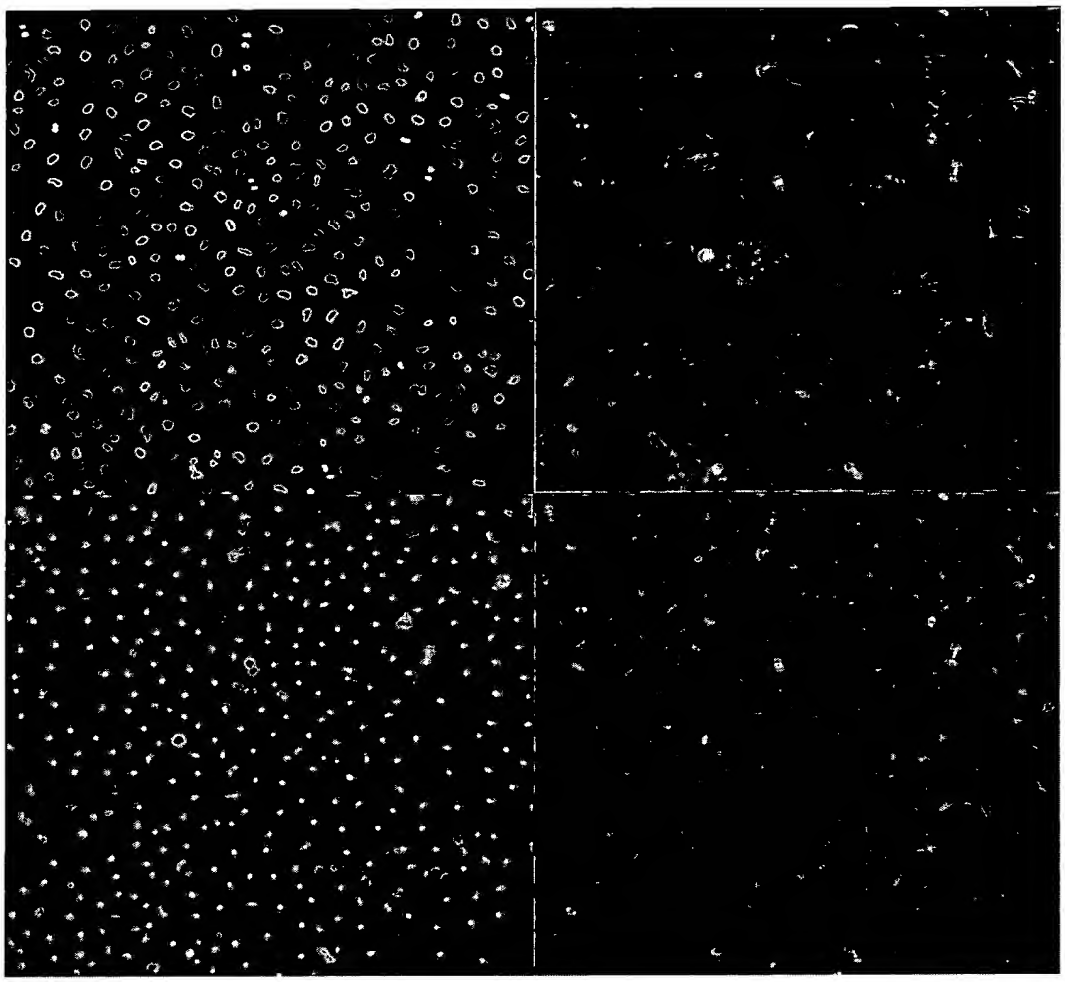

FIG. 8

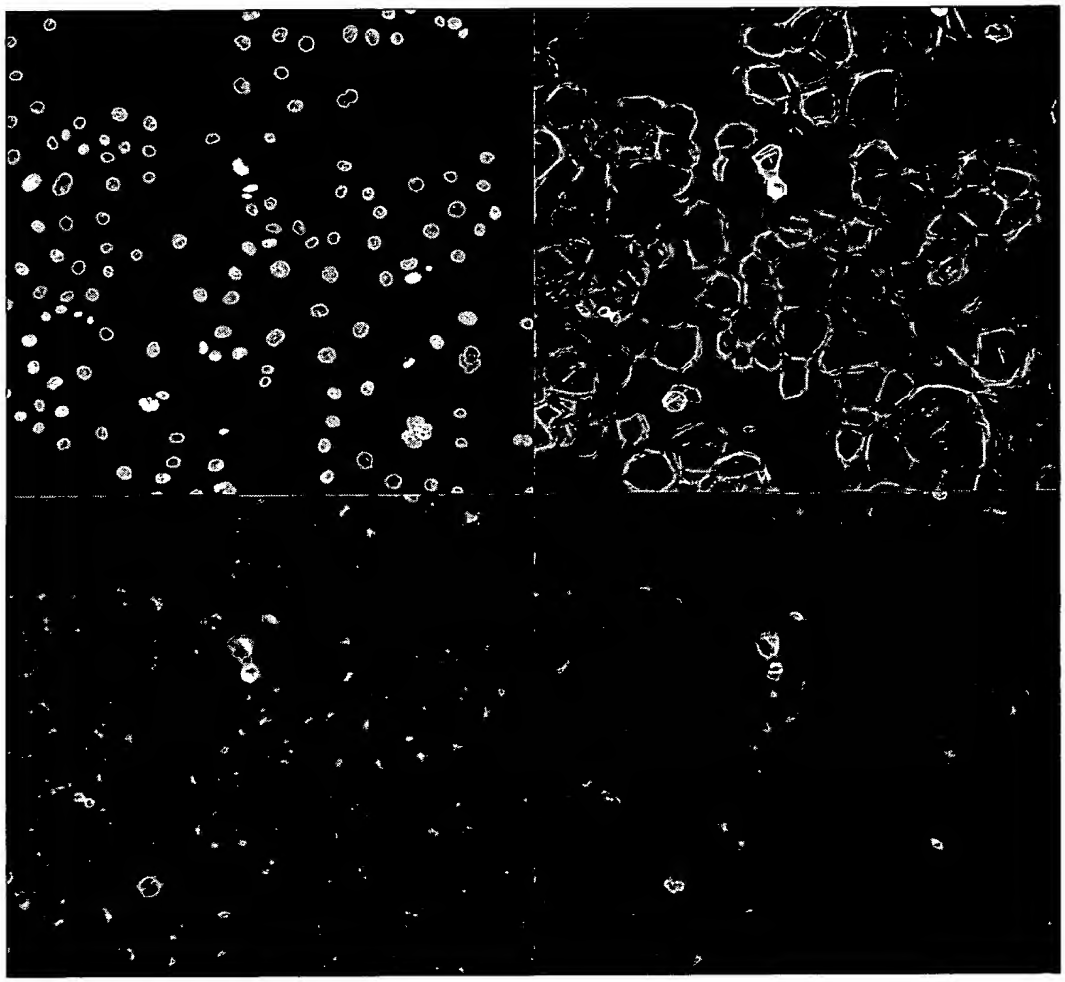

FIG. 9

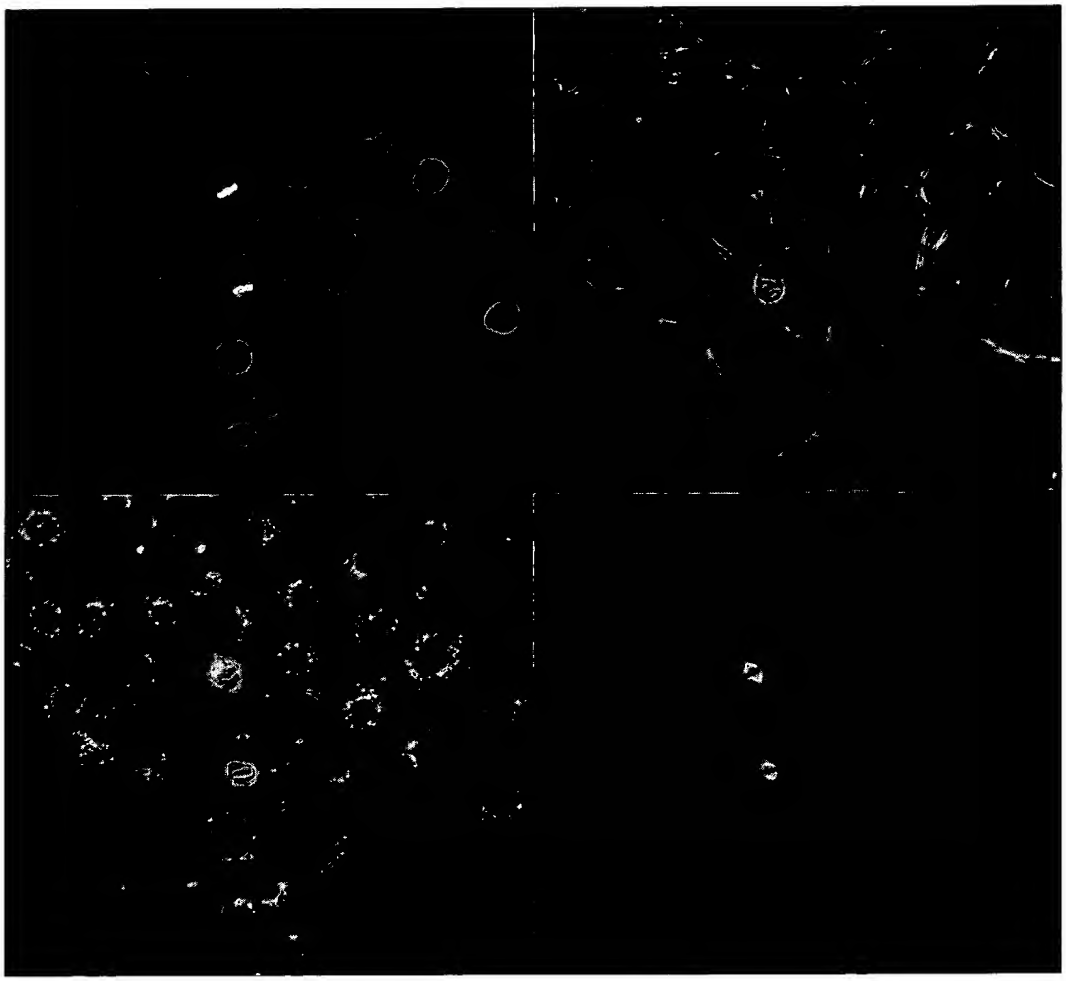

FIG. 10

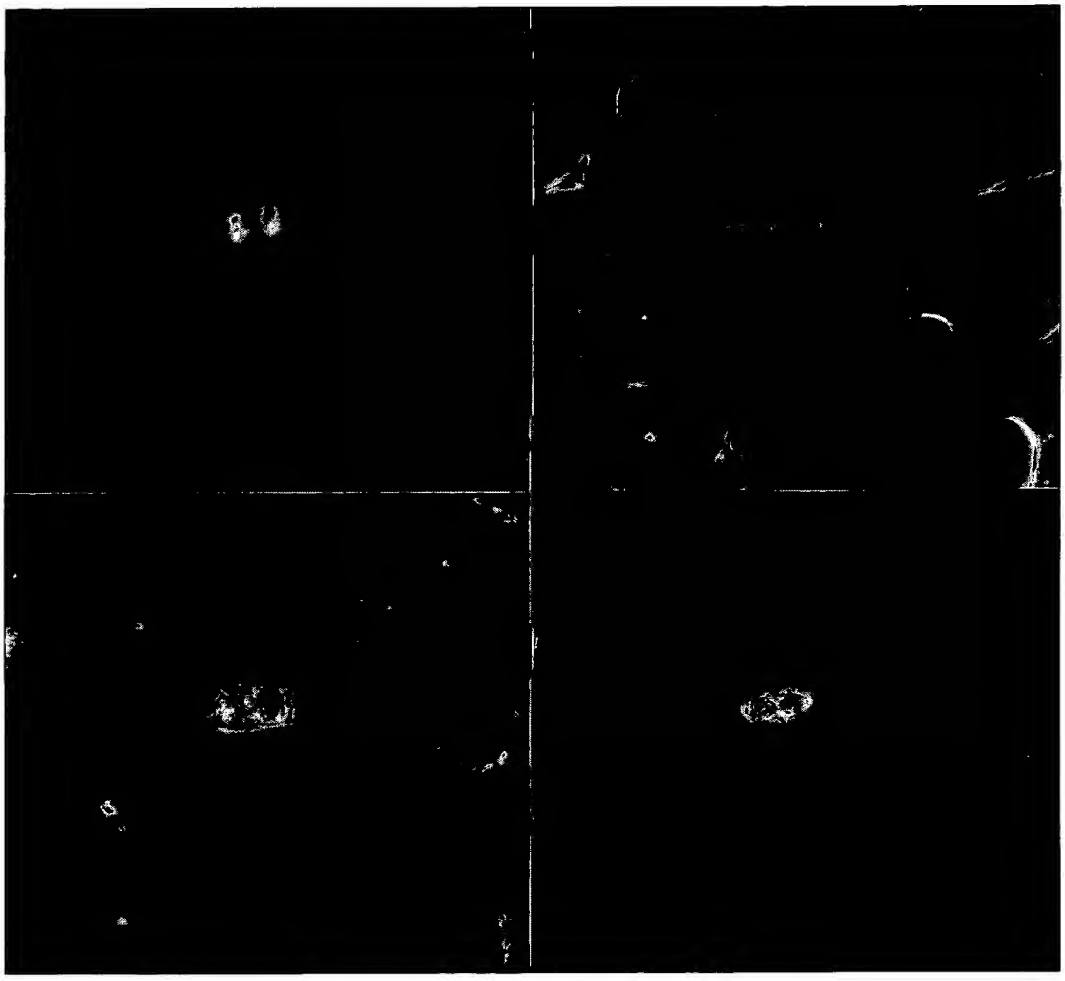

FIG. 11

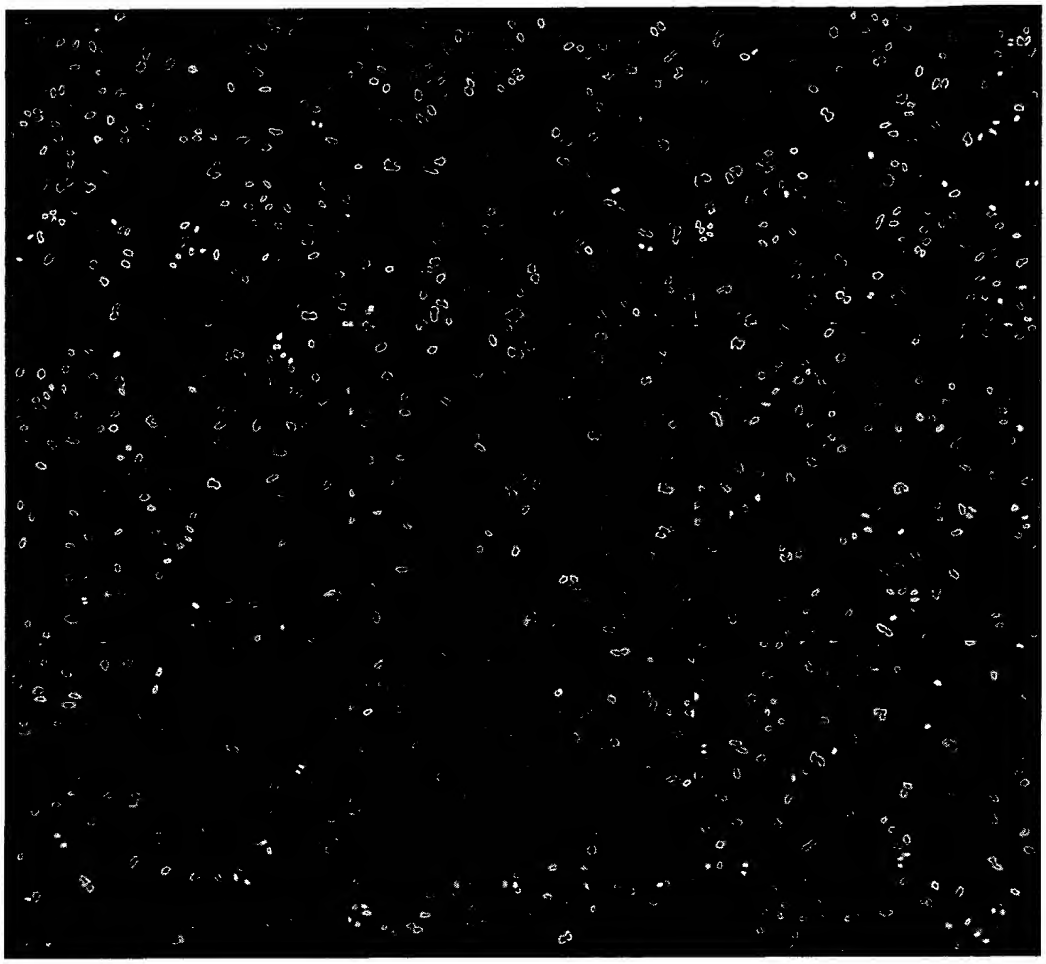

FIG. 12

**Conversion of morphometric parameters into nucleic acid code and clustering of the resulting sequences using Neighbor Joining method.**

| Compound: | Measurements: Count | Area | Perimeter | Length | Breadth | Fiber length | Fiber breadth | Shape factor | Ell. form factor | Inner radius | Outer radius | Mean radius | Equiv. radius | Equiv. sphere vol. | Equiv. prolate vol. | Equiv. oblate vol. | Equiv. sphere surface area | Average gray value | Total gray value | Optical density | Radial dispersion | Texture Difference Moment | EFA Harmonic 2, Semi-Major | EFA Harmonic 2, Semi-Minor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Control | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | a | t | t |
| Taxol | a | t | t | t | t | t | t | t | a | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t |
| CD | c | a | a | a | t | a | t | t | c | a | a | a | a | a | a | a | a | t | a | a | a | t | a | g |
| Nocodozol | c | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t |
| Staurosporine | g | g | c | a | a | t | a | a | t | g | a | a | a | t | g | g | g | a | a | t | a | t | a | a |
| Vinblastine | c | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | t | g | t | t | t | t | t |
| Hydroxyurea | g | t | t | t | t | t | t | g | t | t | t | t | t | t | t | t | t | t | t | c | t | a | t | t |

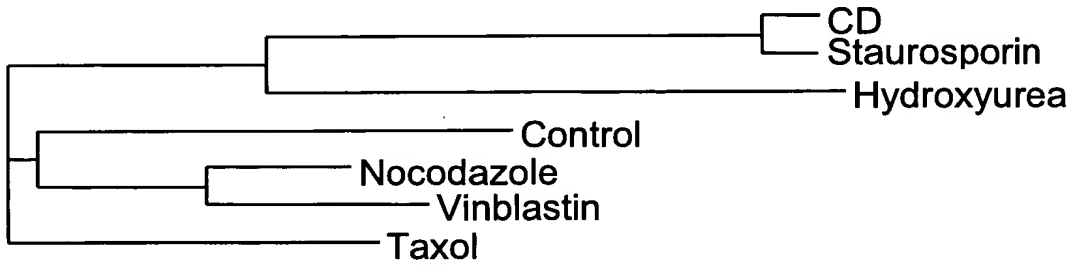


FIG. 13

**Conversion of morphometric parameters into amino acid codes and clustering of the resulting sequences using Neighbor Joining method.**

| | Count | Area | Perimeter | Length | Breadth | Fiber length | Fiber breadth | Shape factor | Ell. form factor | Inner radius | Outer radius | Mean radius | Equiv. radius | Equiv. sphere vol. | Equiv. prolate vol. | Equiv. oblate vol. | Equiv. sphere surface are | Average gray value | Total gray value | Optical density | Radial dispersion | Texture Difference Momei | EFA Harmonic 2, Semi-Major Axis | EFA Harmonic 2, Semi-Minor Ax | EFA Harmonic 2, Semi-Major A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Control | H | P | T | T | N | S | D | W | E | S | T | T | T | F | C | C | P | P | M | C | T | G | T | T | Y |
| Taxol | G | F | M | M | P | M | P | H | G | S | M | M | W | C | F | P | F | R | C | M | M | H | M | P | S |
| CD | F | G | G | G | M | G | M | K | A | G | G | G | G | G | G | G | G | H | G | G | G | M | G | V | H |
| Nocodozol | W | F | M | M | W | M | P | T | R | S | M | M | M | F | M | W | F | M | M | R | M | M | M | F | G |
| Staurosporine | N | V | A | G | G | M | G | G | Y | V | G | G | G | M | V | V | V | G | G | H | G | M | G | G | V |
| Vinblastine | F | W | W | M | W | W | C | W | D | S | M | W | W | M | M | M | W | M | V | E | M | M | M | F | P |
| Hydroxyurea | S | H | H | H | H | H | H | V | H | H | H | H | H | H | H | H | H | H | H | A | H | G | H | H | D |

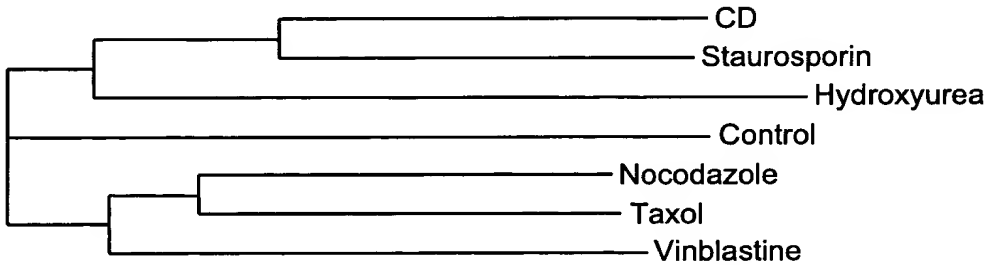


FIG. 14